

We claim:

1 1. A power system comprising:
2 a plurality of source inputs that are connectable to a plurality of input sources;
3 an OR circuit coupled to the source inputs and having an output;
4 a standby converter coupled to the OR circuit output that provides a voltage
5 rail responsive to a sufficient source voltage at the OR circuit output;
6 a power control circuit that is coupled to the standby converter and, responsive
7 to a control signal, provides a working voltage; and
8 at least one converter circuit that converts the working voltage to a supply
9 voltage.

1 2. The power system of claim 1 wherein the OR circuit is a diode OR
2 circuit.

1 3. The power system of claim 1 further including a power switch that
2 couples the working voltage to the at least one converter circuit.

1 4. The power system of claim 3 wherein the power switch is a power FET.

1 5. The power system of claim 1 wherein the power control circuit is further
2 responsive to command signals to provide the working voltage.

1 6. The power system of claim 5 wherein the at least one converter circuit
2 provides at least one of the command signals.

1 7. The power system of claim 1 wherein the at least one converter circuit
2 includes a mid-rail converter.

1 8. The power system of claim 1 wherein the at least one converter circuit
2 includes a low-rail converter.

1 9. The power system of claim 8 wherein the at least one converter circuit
2 further includes a mid-rail converter.

1 10. A power system comprising:
2 a plurality of source inputs that are connectable to a like plurality of DC voltage
3 input sources;
4 an OR circuit coupled to the source inputs and having an output;

5 a standby converter coupled to the OR circuit output that provides a voltage
6 rail responsive to a sufficient source voltage at the OR circuit output;
7 a power control circuit that is coupled to the standby converter and, responsive
8 to a control signal, provides a working voltage; and
9 a plurality of converter circuits that convert the working voltage to a plurality of
10 different DC supply voltages.

1 11. The power system of claim 10 wherein the OR circuit is a diode OR
2 circuit.

1 12. The power system of claim 10 further including a power switch that
2 couples the working voltage to the at least one converter circuit.

1 13. The power system of claim 12 wherein the power switch is a power
2 FET.

1 14. The power system of claim 10 wherein the power control circuit is
2 further responsive to command signals to provide the working voltage.

1 15. The power system of claim 14 wherein the plurality of converter circuits
2 provides one of the command signals.

1 16. The power system of claim 10 wherein the plurality of converter circuits
2 includes a mid-rail converter.

1 17. The power system of claim 10 wherein the plurality of converter circuits
2 includes a low-rail converter.

1 18. A power system comprising:
2 a plurality of source inputs that are connectable to a like plurality of DC voltage
3 input sources;
4 a diode OR circuit coupled to the source inputs and having an output;
5 a standby converter coupled to the OR circuit output that provides a voltage
6 rail responsive to a sufficient source voltage at the OR circuit output;
7 a power control circuit that is coupled to the standby converter and, responsive
8 to a control signal, provides a working voltage; and
9 a plurality of converter circuits that convert the working voltage to a plurality of
10 supply voltages; and

11 a power switch that couples the working voltage from the control circuit to the
12 converter circuits.

1 19. The power system of claim 18 wherein the power switch is a power
2 FET.

1 20. The power system of claim 18 wherein the power control circuit is
2 further responsive to command signals to provide the working voltage.

1 21. The power system of claim 20 wherein the plurality of converter circuits
2 provides at least one of the command signals.

1 22. The power system of claim 18 wherein the plurality of converter circuits
2 includes a mid-rail converter.

1 23. The power system of claim 18 wherein the plurality of converter circuits
2 includes a low-rail converter.

1 24. A method of providing a supply voltage comprising:
2 providing a plurality of source input voltages;
3 ORing the source input voltages to providing a source voltage;
4 monitoring the source voltage;
5 generating a control signal responsive to the source voltage being above a
6 given level;
7 a responsive to the control signal, providing a working voltage from the source
8 voltage; and
9 converting the working voltage to a supply voltage.

1 25. The power system of claim 2 wherein the diode OR is a Schottky power
2 diode OR circuit.